	L#	Hits	Search Text	DBs	Time Stamp
1	L1	88318	graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
2	L2	1845	side adj chain near10 (acrylate or methacrylate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	1
3	L3	1844	macromer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
4	L4	31881 9	ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
5			tsutsumi.in. and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
6	FAMI LY	1	2001-618266.NRAN.	DERWENT	2002/05/06 07:53
7	L7	26	1 and 2 and 3 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
8	L8	126	1 and 3 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	: :
9	L9	h	1 and 2 and 3 and macromonomer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
10	L10	250	1 and macromonomer and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	:

	L#	Hits	Search Text DBs		Time Stamp		
11	L11	224	10 not 8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
12	L12	169	11 and initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
13	L13	22	(("5026755") or ("5714538") or ("5719204") or ("6020400") or ("6005023") or ("5708095") or ("6117921") or ("5589522") or ("6031019") or ("6232369") or ("5708095") or ("6174357")).PN.	USPAT; US-PGPUB; EPO;	2002/05/06 08:08		
14	L14	14	ep-879858-\$.did. or ep-781819-\$.did. or jp-10060360-\$.did. or jp-06100810-\$.did. or ep-851013-\$.did. or ep-783023-\$.did. or ep-722994-\$.did.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
15	L15	37	1 and diazotiz\$5 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
16	L16	53		USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
17	L17	0	1 near10 diazotiz\$5 and 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
18	L18	1	1 same diazotiz\$5 and 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	;		
19	L19	1	1 and diazotiz\$5 and 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	į :		

-	L#	Hits	Search Text	DBs	Time Stamp		
20	L 20	7	1 and diazotiz\$5 and graft\$3 near10 (acrylate or methacrylate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:28		
21	L21	226	1 and diazotiz\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:35		
22	L22	12	polymer near10 diazotiz\$5 near10 monomer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:34		
23	L23	1	1 and (methacrylic or acrylic) adj3 chloride near10 peroxide	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:35		
24	L24	63	graft and diazotiz\$5	USOCR	2002/05/06 09:38		
25	L25	0	graft near10 living adj polymerization	USOCR	2002/05/06 09:39		
26	L26	21	graft near10 living adj polymerization	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	•		
27	L27	3703	polymer near10 initiator and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:55		
28	L28	160	polymer near10 azo near5 initiator and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	:		
29	L29	44	28 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
30	L30	434	27 and 4	USPAT; US-PGPUB; EPO; 20 JPO; DERWENT; 09 IBM_TDB			

	L#	Hits	Search Text DBs		Time Stamp
31	L31	353	polymer near10 (incorporat\$3 or terminal or introduc\$3) near10 initiator and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:58
32	L32	0	1 and (methacrylic or acrylic) adj2 chloride near10 react\$3 near10 peroxide	2002/05/06 11:11	
33	L33	82	polymer near10 (incorporat\$3 or terminal or introduc\$3) near10 initiator same graft	or introduc\$3) JPO: DERWENT:	
34	L34	350	1 and (3 or macromonomer) and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 10:08
35	L36	156	1 and (acrylate or methacrylate) near10 (3 or macromonomer) and 4	near10 (3 or JPO: DERWENT:	
36	L37	14	(("5231131") or ("5147952") or ("3786116") or ("3842059")).PN.	or ("3786116") or JPO: DERWENT:	
37	L41		monomer near10 (uv or ultraviolet or benzotriazole or benzophenone)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
38	L42	298	polymerizable near10 (benzotriazole or benzophenone)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
39	L43	1492	(41 or 42) and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
40	L44	222	(41 or 42) and 4.ti.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	

	L#	Hits	Search Text DBs		Time Stamp
41	L45	920	monomer near10 (benzotriazole		2002/05/06 11:01
42	L46	178	(45 or 42) and 4	USPAT; US-PGPUB; EPO; 2 US-PGPUB; EPO; 2 JPO; DERWENT; 1 IBM_TDB	
43	L47	3	nguyen.in. and shosho.xa.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	!
44	L48	1	react\$3 near10 mononomer near10 (initiator or preroxide) and 1 USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		<u>:</u>
45	L49	1	USPAT; l and (methacrylic or acrylic) adj2 chloride near10 JPO; DERWENT; peroxide IBM_TDB		
46	L50	2	(methacrylic or acrylic) adj2 chloride near10 peroxide	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
47	L51	199	monomer near10 function near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	:
48	L52	0	treat\$4 near10 mononomer near10 (initiator or preroxide) and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
49	L53	57	51 and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	•
50	L54	93	l and polymer near10 function near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:21

	L #	Hits	Search Text	DBs	Time Stamp	
51	L55	6	(polymer or polymeric) adj	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:25	
52	L56	233	(polymer or polymeric) adj initiator and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		
53	L57	41	56 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		
54	L58	754	(treat\$4 or react\$3) near10 halide near10 (initiator or peroxide)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		
55	L59	100	58 and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		
56	L 60	0	acid adj chloride near10 alcohol adj peroxide near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		
57	L61	0	(halide or chloride) near10 alcohol adj peroxide near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		
58	L62	763	method near5 1 near5 polymerization	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		
59	L63	2	62 same azo adj initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:44	
60	L64	82	62 same (halide or chloride or polymer or monomer) near10 (initiator or peroxide)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		

	L#	Hits	Search Text	DBs	Time Stamp		
1	L1	88387		USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
2	L2	15262	polymer near10 (reactive or functional) adj group	USPAT; polymer near10 (reactive or US-PGPUB; EPO; 2 functional) adj group JPO; DERWENT; (IBM_TDB			
3	L3	: U// 5/1 :	monomer near10 (reactive or functional) adj group	2002/05/07 08:06			
4	L4	880	1 and 2 and 3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
5	L 5	153		USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	•		
6	L6	23	5 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:07		
7	L 7	954	backbone same polymer near10 (reactive or functional) adj group	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB			
8	L8	873	(sidechain or side adj chain) same polymer near10 (reactive or functional) adj group				
9	L9	42	1 and 7 and 8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:12		
10	L 10	6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB				

	L#	Hits	Search Text	DBs	Time Stamp
11	L11	129	acrylate or methacrylic or methacrylate) near10 (side	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
12	L12	62	polymeric near5 initiator and ink and 1	2002/05/07 08:29	
13	L13	186	backbone and side adj chain and ink and 1	2002/05/07 08:36	
14	L14	264	(polymer near5 initiator) and ink and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
15	L15	137	initiator adj precursor	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	
16	L16	53	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB		

DERWENT-ACC-NO: 1994-156819

DERWENT-WEEK: 199419

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TITLE: Aq. pigment ink, for ink jet recording & recorder - contains water soluble resin of hydrophilic and hydrophobic polymers, hydrophilic organic solvent and water, having high storage stability, etc.

PATENT-ASSIGNEE: CANON KK [CANO]

PRIORITY-DATA: 1992JP-0251586 (September 21, 1992)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES

MAIN-IPC

JP 06100810 A April 12, 1994 N/A 014 C09D

011/00

APPLICATION-DATA:

PUB-NO APPL-DESCRIPTOR APPL-NO APPL-DATE
JP06100810A N/A 1992JP-0251586 September 21,

1992

INT-CL_(IPC): B41J002/01; B41M005/00; C09D011/02

ABSTRACTED-PUB-NO: JP06100810A

BASIC-ABSTRACT:

The ink contains pigment, water soluble resin, hydrophilic organic solvent and water. The water soluble resin is a graft copolymer consisting of (a) hydrophilic polymer chain segment which contains more than 80 mol.% of monomer selected from among (meth)acrylic acid, maleic acid and (meth)acrylic acid hydroxyalkyl ester and (b) hydrophobic polymer chain segment which contains more than 80 mol.% of monomer selected from among styrene and (meth)acrylic acid alkyl ester in an (a)/(b) ratio of 20:80-80:20 by weight. The copolymer has a number average molecular weight of 1,000-10,000 and a weight average molecular weight of 1,5000-20,000. It is contained in 0.1-5 wt.%. The pigment is contained in 1 to 20, pref. 2-12 wt.%. The organic solvent and water are contained in 3-50 and 10-90 wt.% respectivel y.

USE/ADVANTAGE - The ink is used for ink jet recording in which heat energy is applied to the ink according to recording signal and the ink is sprayed in droplets through small orifices. The aq. pigment ink has high storage stability and can be sprayed for long hours under stabilised condition in ink jet recording to produce prints with high fastness and excellent scuff resistance.

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: A

CLIPPEDIMAGE= JP410060360A PAT-NO: JP410060360A DOCUMENT-IDENTIFIER: JP 10060360 A TITLE: PIGMENT DISPERSION AND COATING AGENT COMPOSITION CONTAINING THE SAME PUBN-DATE: March 3, 1998 INVENTOR-INFORMATION: NAME IWASE, KOJI SHINTANI, TAKEHIKO UCHIYAMA, NORIYUKI ISHIKAWA, HIROYUKI ASSIGNEE-INFORMATION: COUNTRY NAME SAKATA CORP N/A APPL-NO: JP08218726 APPL-DATE: August 20, 1996 INT-CL (IPC): C09D017/00; C09D007/12; C09D011/00; G02B005/20; G03F007/004 ; G03F007/033

PROBLEM TO BE SOLVED: To obtain a pigment dispersion showing improved

microdispersion stability even when the concentration of the pigment in a nonaqueous solvent is high by using a novel substantially colorless pigment dispersant being not a colorant derivative.

SOLUTION: This invention provides a pigment dispersion containing a pigment, a solvent, a pigment dispersant and optionally a binder resin, wherein the pigment dispersant is a graft copolymer comprising at least 10mol% structural units represented by formulas I and/or II (X<SP>1</SP> and X<SP>2</SP> are each a 2-4C divalent hydrocarbon group; i and j are each 1-100; Y is a 2-20C divalent hydrocarbon group; R<SP>1</SP> and R<SP>4</SP> are each H or methyl; Z<SP>1</SP> and Z<SP>2</SP> are each a 1-20C monovalent active-hydrogen free monovalent organic group bonded to X<SP>1</SP>, X<SP>2</SP> or the $\label{eq:alpha}$ carbon of the carbonyl through any of O, N and S; and so forth) and at least 10mol% structural units represented by formulas III and/or IV (R<SP>6</SP) and R<SP>10</SP) are each H or methyl; and so forth) and having a weight-average molecular weight of 3,000-100,000 and is used in an amount of 0.2 pt.wt. per 100 pts.wt. pigment.

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(12) 公開特許公報(A)

(11)特許出願公開番号

特開平10-60360

(43)公開日 平成10年(1998) 3月3日

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	7/12	PSM			7/12		PSM	
	11/00	PTS			11/00		PTS	
G 0 2 B	5/20	101		G 0 2 B	5/20		101	
G03F	7/004	505		G03F	7/004		505	
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(22)出顧日		平成8年(1996)8月	月20日	大阪府大阪市西区江戸堀1丁目23番			丁目23番37号	
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					インク	ス株式	会社内	
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				(74)代理	人 弁理士	朝日	奈 宗太 (外1名)
								最終頁に続く

(54) 【発明の名称】 顔料分散物及びそれを用いた被覆剤組成物

(57)【要約】

【課題】 非水溶媒中で顔料濃度が高くても微分散安定 化の向上された顔料分散物を提供する。

【解決手段】 顔料、溶媒、顔料分散剤、及び必要に応 じてバインダー樹脂を含む顔料分散物において、顔料分 散剤として、重量平均分子量3,000~100,00 0のグラフト共重合体であって、当該グラフト共重合体 中、一般式(1)及び/又は一般式(2)で表される構 成単位を少なくとも10モル%相当する量、及び一般式 (3)及び/又は一般式(4)で表わされる構成単位を 少なくとも10モル%相当する量含有するグラフト共重 合体を、顔料100重量部に対して少なくとも0.2重 量部含有することを特徴とする顔料分散物。

$$\begin{array}{c|c}
c H_2 - o C Y C + (0 - X^1) + Z^1 \\
c O O C H_2 C R^2 - O H \\
c R^1 C H_2
\end{array}$$

(式中、X1は炭素数が2~4の範囲にある2価の炭化 水素基を、iは1~100の範囲の整数を示す)

(式中、X²は炭素数が2~4の範囲にある2価の炭化 水素基を、jは0~100の範囲の整数を示す)

